

Future Direction of Standards in Logistics Engineering

30 Aug 11

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SUSTAINING THE ARMY THROUGH THE MATERIEL LENS...

Report Documentation Page

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Standards Environment

- Background
- ASD Suite of Standards
- TechAmerica Standards
- ISO 10303 Standards
- MIL Standards
- Summary



UNCLASSIFIED

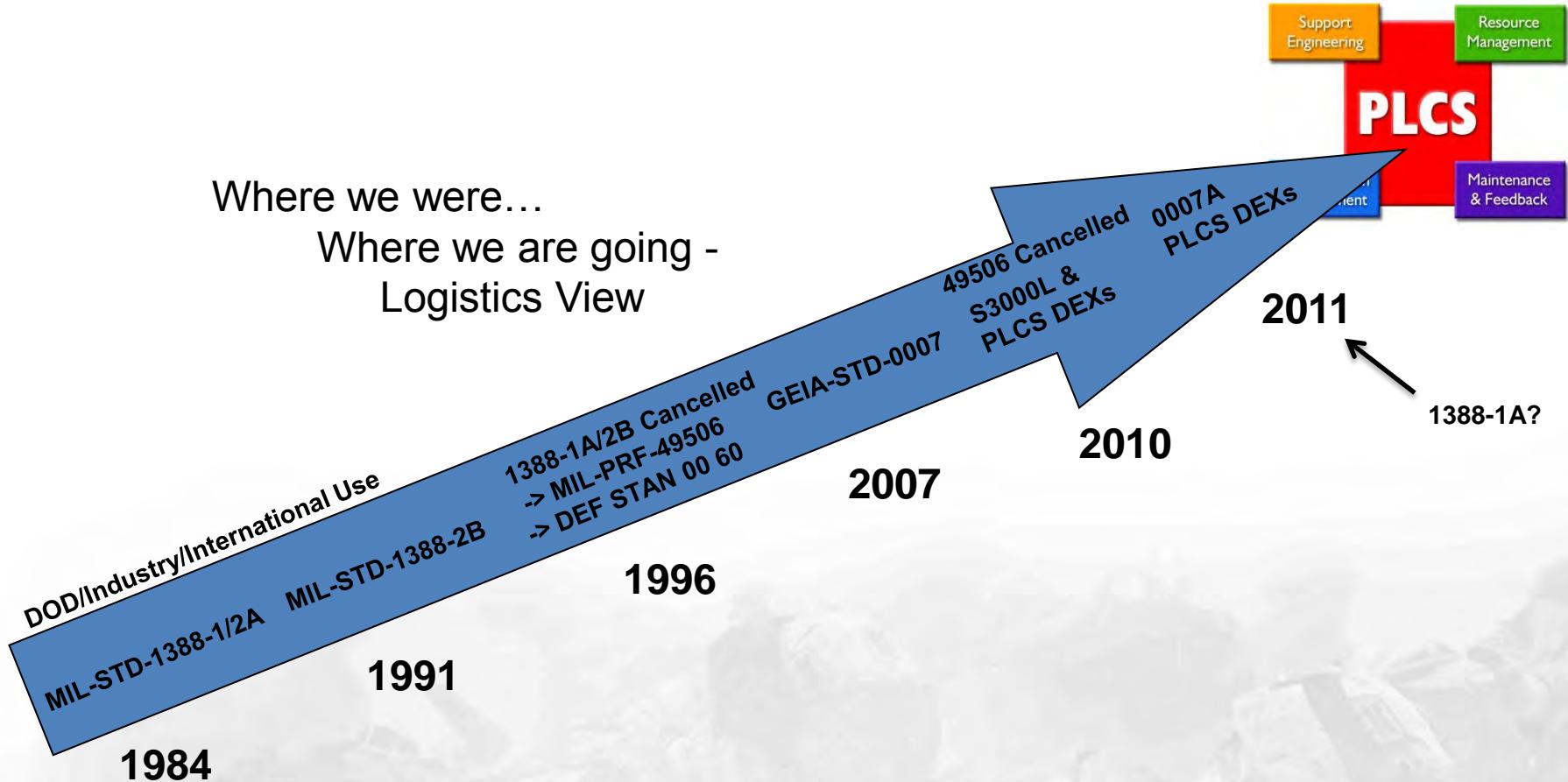
Standards Environment

Background



Where we were...

Where we are going -
Logistics View



UNCLASSIFIED



TechAmerica Standards

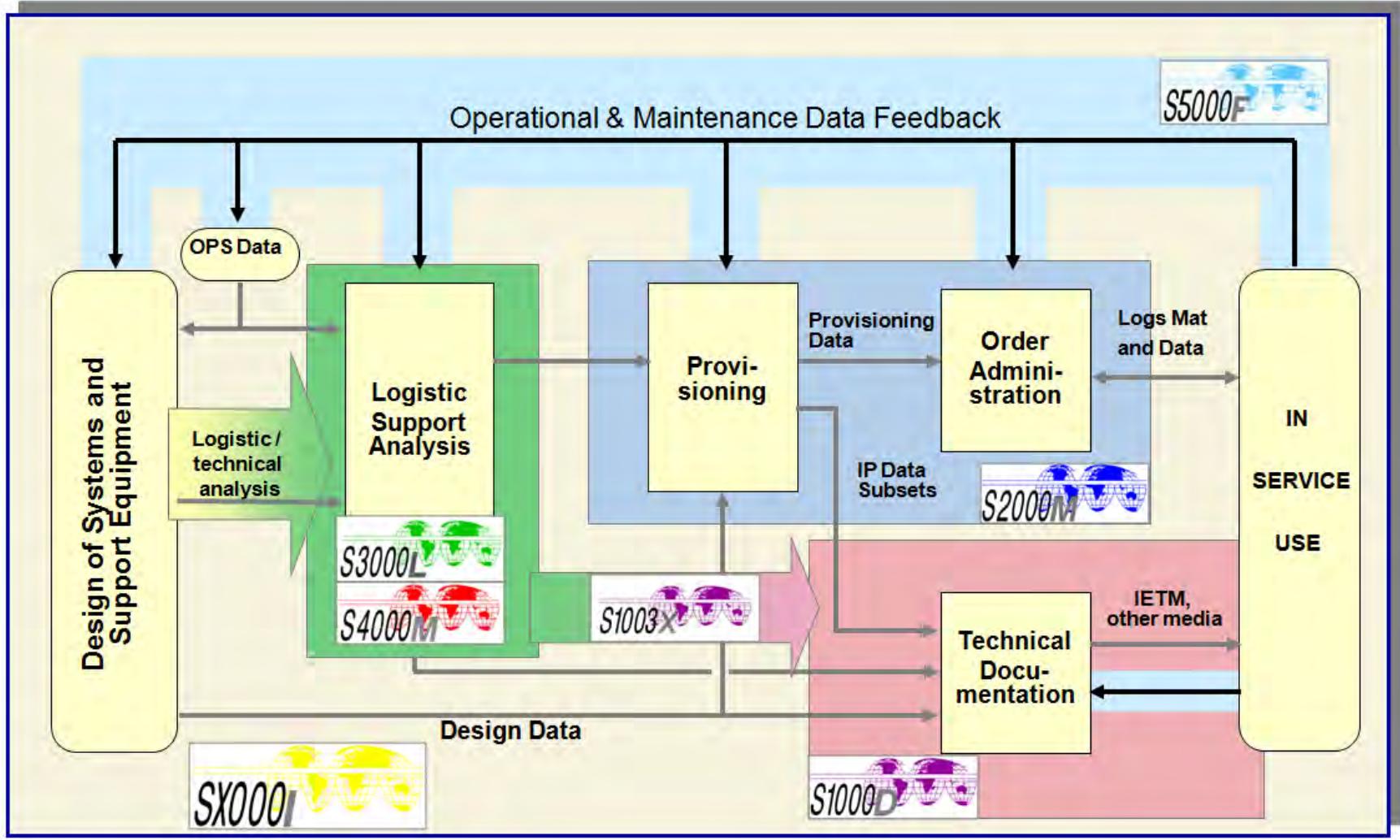
(Formerly GEIA)



- **GEIA-STD-0007, Logistics Product Data**
 - Data Exchange Standard
 - Based on cancelled MIL-STD-1388-2B/MIL-PRF-49506
 - Stepping Stone to Implementation of ISO 10303, AP239, PLCS Data Exchange Sets
- **EIA-836A, Configuration Management Data Exchange and Interoperability**
 - Replaces MIL-STD-2549
- **EIA-649, Configuration Management**
 - Re-instatement of MIL-STD-973 Under Consideration
- **EIA-632, Processes for Engineering a System**
- **EIA-859, Data Management**



Aerospace and Defence Industries Association of Europe (ASD) Standards





ASD Standards Implementation



- **S1000D, International specification for technical publications**
 - MIL-STD-3031, Army Business Rules for S1000D
- **S2000M, Materiel Management**
 - GEIA-STD-0007, Logistics Product Data (Initial Provisioning Data)
 - Future Harmonized Data Exchange Set (S2000M/GEIA-STD-0007)
- **S3000L, International procedure specification for Logistics Support Analysis**
 - Similar Data Model with GEIA-STD-0007
 - Mixes Normative and Informative - Difficult to Contract For
 - Re-instatement of Logistics Support Analysis Military Standard - Normative Approach
- **S4000M, International procedural handbook for developing scheduled maintenance programs**
 - SAE JA 1011/1012 RCM Standard/Guide
- **S5000F, Specification for Operational and Maintenance Data Feedback**
 - MIL-STD-3008 Interactive Electronic Technical Manual (IETM) Technical Data Requirements to Support the Global Combat Support System - Army (GCSS-A)
 - MIMOSA, Open Systems Architecture for Enterprise Application Integration/ Condition Based Maintenance



ISO 10303 STEP

Standard for the Exchange of Product Model Data



- STEP is an established international standard for the exchange, integration and sharing of product data via Application Protocols (APs)
 - Geometry
 - Product structure
 - Manufacturing interfaces
 - Drawings
 - Finite Element Analysis
 - Printed Circuit Assemblies
 - Wiring looms
 - Mechanical Design
 - Construction industry
- Supports wide range of IT - ASCII, databases, XML, XMI,.....
- Process modelling independent of information in EXPRESS



ISO 10303 AP 239

Product Life Cycle Support



- Defines all activities required to develop, field and sustain a product (IDEFO Model)
- Includes Complex Data Model
- Implementation of Data Model Via Data Exchange Sets (DEXs)



ISO 10303 AP 239

Product Life Cycle Support



- Current OASIS (Organization for the Advancement of Structured Information standards) AP239 Data Exchange Sets (DEX)

- Aviation Maintenance
- Faults Related to Product Structures
- Item Identification
- Maintenance Plan
- Operational Feedback
- Product as Individual
- Product Breakdown for Support
- System Requirements
- Task Set (Published)
- Work Package Definition
- Work Package Report



LOGSA Working
On Nine DEXs
Using GEIA-STD-0007



New Industry
Standard for
Exchange of
Acquisition Logistics
Data



Military Standards

- Recently Renewed MIL Standards
 - MIL-STD-31000 Tech Data Packages
 - MIL-STD-3031 Army Business rules for S1000D Tech Pubs
 - MIL-STD-46855 Human Factors Engineering
- Other MIL Standards revitalized?
 - MIL-STD-973 Configuration Management
 - MIL-STD-1388-1 Logistics Support Analysis
 - Etc...



Summary

Industry
Standards

Military
Standards

VS

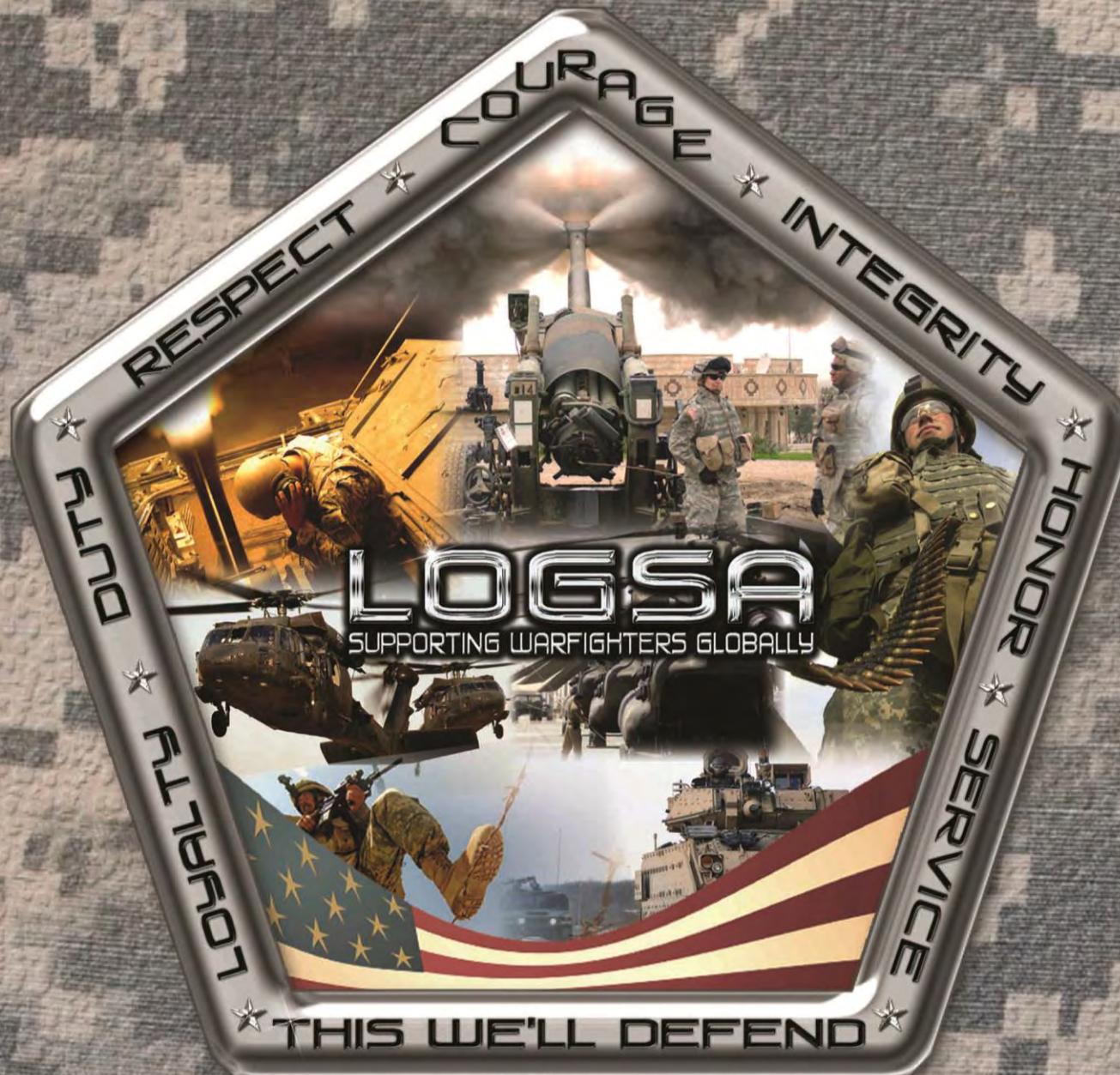
Striking the Best Balance
For Acquisition Logistics Data



Want To Know More



Questions?



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